Issuance Date: December 31, 2003
Effective Date: January 1, 2004
Expiration Date: December 31, 2008
Modification Date:

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE PERMIT No. WA-002918-1

State of Washington
DEPARTMENT OF ECOLOGY
Northwest Regional Office
3190 – 160th Avenue SE
Bellevue, WA 98008-5452

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

KING COUNTY WASTEWATER TREATMENT DIVISION

King Street Center, KSC-NR-0512

201 South Jackson Street

Seattle, Washington 98104-3855

The **West Point Service Area** which includes the West Point Treatment Plant and four CSO Treatment Facilities (reference Table 1, Summary of Permitted Treatment Processes and Associated Outfalls, which follows) is authorized to discharge in accordance with the special and general conditions that follow.

Kevin C. Fitzpatrick
Water Quality Section Manager
Northwest Regional Office
Washington State Department of Ecology

TABLE 1: SUMMARY OF PERMITTED TREATMENT PROCESSES AND ASSOCIATED OUTFALLS

Plant Name	West Point Wastewater Treatment Plant	Carkeek CSO Treatment Plant	Alki CSO Treatment Plant	Denny/Elloitt West Storage and CSO Treatment Facility	Henderson/MLK Storage and CSO Treatment Facility
Plant Address	1400 Utah Street West Seattle, Washington 98199	1201 NW Carkeek Park Road Seattle, Washington 98177-4640	3380 Beach Drive SW Seattle, Washington 98116-2616	545 Elliott Ave. W. Seattle, WA 98119	Outlet Regulator 9829 42nd Avenue South Seattle, Washington 98118
Receiving Water	Puget Sound	Puget Sound	Puget Sound	Elliott Bay	Duwamish Waterway
Water Body ID No.				1224026474620	1222956475022
Old WBID No.	WA-PS-0240	WA-PS-0240	WA-PS-0240	WA-09-0010	WA-09-1010
Plant Type	Activated Sludge, Secondary Treatment Plant	Satellite CSO Treatment and Storage Plant	Satellite CSO Treatment and Storage Plant	Satellite CSO Treatment and Storage Plant	Satellite CSO Treatment and Storage Plant
Discharge Location					
Latitude	47° 39' 38.8" N	47° 42' 45.5" N	47° 34' 12.9" N	47° 37' 3.18" N	47° 30' 42.98" N
Longitude	122° 26' 55.1" W	122° 23' 16.4" W	122° 25' 21.0" W	122° 21' 42.68" W	122° 17' 50.48" W

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TABLE 2: SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A	Discharge Monitoring Report	Monthly	February 25, 2004
	Elliott West Storage & CSO Treatment	Monthly	May 25, 2005
	Henderson/MLK Storage & CSO Treatment	Monthly	May 25, 2005
S3.E	Noncompliance Notification	As necessary	
S3.F	Shellfish Protection	As necessary	
S4.B	Plans for Maintaining Adequate Capacity	As necessary	
S4.D	Notification of New or Altered Sources	As necessary	
S4.E	Assessment of Flow and Waste Load (West Point, Carkeek, Alki, Elliott West and Henderson/MLK Plants)	1/permit cycle	June 30, 2008
S5.G	Operations and Maintenance Manual Update or Review (Confirmation Letter)	Annually	December 31, 2004
S6.A.5	Pretreatment Report	1/year	June 30, 2004
S6.C	Effluent Analysis Report	1/permit cycle	June 30, 2008
S8.B	Acute Toxicity Effluent Characterization Data	4/permit cycle	June 30, 2007
		once/quarter during last year	September 30, 2007
			December 31, 2007
			March 31, 2008
S8.B	Acute Toxicity Summary Report	1/permit cycle	June 30, 2008
S9.B	Chronic Toxicity Effluent Characterization Data	4/permit cycle	June 30, 2007
		once/quarter during last year	September 30, 2007
			December 31, 2007
			March 31, 2008
S9.B	Chronic Toxicity Summary Report	1/permit cycle	June 30, 2008
S10.A	Sediment Sampling and Analysis Plan	1/permit cycle	December 31, 2004
S10.B	Sediment Data Report	1/permit cycle	August 31, 2006
S11.A	Chemical Analysis of Influent and Effluent	3/permit cycle during last year	June 30, 2008
S12.B	Combined Sewer Overflow Report	Annually	November 1, 2004

Permit Section	Submittal	Frequency	First Submittal Date
S12.C	Combined Sewer Overflow Reduction Plan Amendment	1/permit cycle	June 30, 2008
S13.	Wet Weather Operation Report	As necessary	
S14.	Outfall Evaluation	1/permit cycle	June 30, 2008
G1.	Notice of Change in Authorization	As necessary	
G4.	Permit Application for Substantive Changes to the Discharge	As necessary	
G5.	Engineering Report for Construction or Modification Activities	As necessary	
G7.	Application for Permit Renewal	1/permit cycle	June 30, 2008
G21.	Notice of Planned Changes	As necessary	
G22.	Reporting Anticipated Noncompliance	As necessary	

SPECIAL CONDITIONS

S1. DISCHARGE LIMITATIONS

A. Effluent Limitations Outfall 001 (West Point Treatment Plant)

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge municipal wastewater at the permitted location subject to complying with the following limitations:

EFFLUENT LIMITATIONS[a]: OUTFALL # 1		
Parameter	**Average Monthly**	**Average Weekly**
Carbonaceous Biochemical Oxygen Demand[b] ($CBOD_5$)	25 mg/L, 44,800 lbs./day	40 mg/L, 71,700 lbs./day
Total Suspended Solids[b]	30 mg/L, 53,800 lbs./day	45 mg/L, 80,700 lbs./day
Fecal Coliform Bacteria	200/100 mL	400/100 mL
pH[c]	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 9.0.	
Parameter	**Average Monthly**	**Maximum Daily[d]**
Total Residual Chlorine	160 µg/L (285 ppd)	420 µg/L

[a] The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.

[b] During *May through October*, the average monthly effluent concentration for **$CBOD_5$** shall not exceed 25 mg/L or 15 percent of the respective monthly average influent concentrations, whichever is more stringent.

During *November through April*, the average monthly effluent concentration for **$CBOD_5$** shall not exceed 25 mg/L or 20 percent of the respective monthly average influent concentrations, whichever is more stringent.

During *May through October*, the average monthly effluent concentration for **TSS** shall not exceed 30 mg/L or 15 percent of the respective monthly average influent concentrations, whichever is more stringent.

During *November through April*, the average monthly effluent concentration for **TSS** shall not exceed 30 mg/L or 20 percent of the respective monthly average influent concentrations, whichever is more stringent.

[c] Indicates the range of permitted values. When pH is continuously monitored, excursions between 5.0 and 6.0, or 9.0 and 10.0 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month. Any excursions below 5.0 and above 10.0 are violations. The instantaneous maximum and minimum pH shall be reported monthly.

[d] The maximum daily effluent concentration determined from a continuous measurement is calculated as the average of the pollutant concentrations measured over the day.

B. Effluent Limitations Outfall 046 (Carkeek CSO Treatment Plant)

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated combined sewer overflows at the permitted location subject to the following limitations. Discharges from this outfall are prohibited except as a result of a precipitation event. CSO discharges that negatively impact the beneficial uses of the receiving water, as identified under applicable water quality standards, are not authorized.

The interim permit limits apply from January 1, 2004 through December 31, 2005.

Parameter	Discharge Limitations (Monthly)	Discharge Limitations[a] (Yearly Average)	Discharge Limitations[b] (Long-term Average)
Total Suspended Solids Removal Efficiency[c]	NA	50%	NA
Settleable Solids, ml/l/hr	1.9 Maximum	0.3	NA
Number of Events per year	NA	NA	10
Average Volume per year, million gallons	NA	NA	46 million gallons/year
[a] The yearly limitations will be calculated using per-event data points. Data shall be collected and reported on a schedule concurrent with the annual CSO report, June 1 to May 31, to include the entire wet season for purposes of determining compliance with these limitations.			
[b] Long-term average will be calculated using data collected over a full permit cycle. Data shall be collected and reported for the period of the permit cycle prior to permit renewal.			
[c] The total removal efficiency for TSS is to be calculated on a mass balance basis as the percent of solids captured at the CSO Treatment Plant and then permanently removed at the West Point Treatment Plant based on the estimated removal efficiency at West Point.			

The final permit limits are effective beginning January 1, 2006 through the end of the permit.

Parameter	Discharge Limitations (Monthly)	Discharge Limitations[a] (Yearly Average)	Discharge Limitations[b] (Long-term Average)
Total Suspended Solids Removal Efficiency[c]		50%	
Fecal Coliform Bacteria	2,800/100 mL geometric mean	NA	NA

Parameter	Discharge Limitations (Monthly)	Discharge Limitations[a] (Yearly Average)	Discharge Limitations[b] (Long-term Average)
Settleable Solids, ml/l/hr	1.9 Maximum	0.3	NA
Number of Events per year	NA	NA	10
Average Volume per year, million gallons	NA	NA	46 million gallons/year

Parameter	Average Monthly	Maximum of Daily Averages[d]
Total Residual Chlorine	NA	490 µg/L

[a] The yearly limitations will be calculated using per-event data points. Data shall be collected and reported on a schedule concurrent with the annual CSO report, June 1 to May 31, to include the entire wet season for purposes of determining compliance with these limitations.

[b] Long-term average will be calculated using data collected over a full permit cycle. Data shall be collected and reported for the period of the permit cycle prior to permit renewal.

[c] The total removal efficiency for TSS is to be calculated on a mass balance basis as the percent of solids captured at the CSO Treatment Plant and then permanently removed at the West Point Treatment Plant based on the estimated removal efficiency at West Point.

[d] The maximum daily effluent concentration determined from a continuous measurement is calculated as the average of the pollutant concentrations measured over the day.

C. Effluent Limitations Outfall 051 (Alki CSO Treatment Plant)

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated combined sewer overflows at the permitted location subject to the following limitations. Discharges from this outfall are prohibited except as a result of a precipitation event. CSO discharges that negatively impact the beneficial uses of the receiving water, as identified under applicable water quality standards, are not authorized.

The interim permit limits apply January 1, 2004 through December 31, 2005.

Parameter	Discharge Limitations (Monthly)	Discharge Limitations[a] (Yearly Average)	Discharge Limitations[b] (Long-term Average)
Total Suspended Solids Removal Efficiency[c]	NA	50%	NA
Settleable Solids, ml/l/hr	1.9 Maximum	0.3	NA
Number of Events per year	NA	NA	29/year
Average Volume per year, million gallons	NA	NA	108 million gallons/year

Parameter	Discharge Limitations (Monthly)	Discharge Limitations[a] (Yearly Average)	Discharge Limitations[b] (Long-term Average)
[a] The yearly limitations will be calculated using per-event data points. Data shall be collected and reported on a schedule concurrent with the annual CSO report, June 1 to May 31, to include the entire wet season for purposes of determining compliance with these limitations.			
[b] Long-term average will be calculated using data collected over a full permit cycle. Data shall be collected and reported for the period of the permit cycle prior to permit renewal.			
[c] The total removal efficiency for TSS is to be calculated on a mass balance basis as the percent of solids captured at the CSO Treatment Plant and then permanently removed at the West Point Treatment Plant based on the estimated removal efficiency at West Point.			

The final permit limits are effective beginning January 1, 2006 through the end of the permit.

Parameter	Discharge Limitations (Monthly)	Discharge Limitations[a] (Yearly Average)	Discharge Limitations[b] (Long–term Average)
Total Suspended Solids Removal Efficiency[c]	NA	50%	NA
Fecal Coliform Bacteria	1,700/100 mL geometric mean	NA	NA
Settleable Solids, ml/l/hr	1.9 Maximum	0.3	NA
Number of Events per year	NA	NA	29/year
Average Volume per year, million gallons	NA	NA	108 million gallons/year

Parameter	Average Monthly	Maximum of Daily Averages[d]
Total Residual Chlorine	NA	290 µg/L

[a] The yearly limitations will be calculated using per-event data points. Data shall be collected and reported on a schedule concurrent with the annual CSO report, June 1 to May 31, to include the entire wet season for purposes of determining compliance with these limitations.
[b] Long-term average will be calculated using data collected over a full permit cycle. Data shall be collected and reported for the period of the permit cycle prior to permit renewal.
[c] The total removal efficiency for TSS is to be calculated on a mass balance basis as the percent of solids captured at the CSO Treatment Plant and then permanently removed at the West Point Treatment Plant based on the estimated removal efficiency at West Point.
[d] The maximum daily effluent concentration determined from a continuous measurement is calculated as the average of the pollutant concentrations measured over the day.

D. Effluent Limitations Outfall 027 b (Elliott West CSO Treatment Facility)

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated combined sewer overflows at the permitted location subject to the following limitations. Discharges from this outfall are prohibited except as a result of a precipitation event. CSO discharges that negatively impact the beneficial uses of the receiving water, as identified under applicable water quality standards, are not authorized.

The Permittee is required to **report only** the results of the applicable permit limits from the issuance date of the modified permit **until May 31, 2005**. No limit will apply until the beginning of the water year which runs from June 1st through May 31st of the following year.

The interim permit limits apply from June 1, 2005 through December 31, 2005.

Parameter	Discharge Limitations (Monthly)	Discharge Limitations[a] (Yearly Average)	Discharge Limitations[b] (Long-term Average)
Total Suspended Solids Removal Efficiency[c]	report	50%	NA
Settleable Solids, ml/l/hr	1.9 Maximum	0.3	NA
Number of Events per year	report	Report	NA
Average Volume per year, million gallons	report	Report	NA

[a] The yearly limitations will be calculated using per-event data points. Data shall be collected and reported on a schedule concurrent with the annual CSO report, June 1 to May 31, of the following year, to include the entire wet season for purposes of determining compliance with these limitations.

[b] Long-term average will be calculated using data collected over a full permit cycle. Data shall be collected and reported for the period of the permit cycle prior to permit renewal.

[c] The total removal efficiency for TSS is to be calculated on a mass balance basis as the percent of solids captured at the CSO Treatment Facility and then permanently removed at the West Point Treatment Plant or South Plant. The reported monthly average TSS% removal efficiency at West Point may be used for calculating the total removal efficiency for the CSO Treatment Facility.

The final permit limits are effective beginning January 1, 2006 through the expiration date of the permit.

Parameter	Discharge Limitations (Monthly)	Discharge Limitations[a] (Yearly Average)	Discharge Limitations[b] (Long–term Average)
Total Suspended Solids Removal Efficiency[c]	report	50%	NA
Fecal Coliform Bacteria	400/100 mL geometric mean	Report	NA
Settleable Solids, ml/l/hr	1.9 Maximum	0.3	NA
Number of Events per year	report	Report	NA
Average Volume per year, million gallons	report	Report	NA

Parameter	Average Monthly	Maximum of Daily Averages[d]
Total Residual Chlorine	NA	44 µg/L

[a] The yearly limitations will be calculated using per-event data points. Data shall be collected and reported on a schedule concurrent with the annual CSO report, June 1 to May 31, of the following year, to include the entire wet season for purposes of determining compliance with these limitations.

[b] Long-term average will be calculated using data collected over a full permit cycle. Data shall be collected and reported for the period of the permit cycle prior to permit renewal.

[c] The total removal efficiency for TSS is to be calculated on a mass balance basis as the percent of solids captured at the CSO Treatment Facility and then permanently removed at the West Point Treatment Plant or South Plant. The reported monthly average TSS% removal efficiency at West Point may be used for calculating the total removal efficiency for the CSO Treatment Facility.

[d] The maximum daily effluent concentration determined from a continuous measurement is calculated as the average of the pollutant concentrations measured over the day.

E. Effluent Limitations Outfall 044 (Henderson/MLK CSO Treatment Facility)

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated combined sewer overflows at the permitted location subject to the following limitations. Discharges from this outfall are prohibited except as a result of a precipitation event. CSO discharges that negatively impact the beneficial uses of the receiving water, as identified under applicable water quality standards, are not authorized.

The Permittee is required to **report only** the results of the applicable permit limits from the issuance date of the modified permit **until May 31, 2005**. No limit will

apply until the beginning of the water year which runs from June 1 through May 31 of the following year.

The interim permit limits apply from June 1, 2005 through December 31, 2005.

Parameter	Discharge Limitations (Monthly)	Discharge Limitations[a] (Yearly Average)	Discharge Limitations[b] (Long-term Average)
Total Suspended Solids Removal Efficiency[c]	report	50%	NA
Settleable Solids, ml/l/hr	1.9 Maximum	0.3	NA
Number of Events per year	report	report	NA
Average Volume per year, million gallons	report	report	NA

[a] The yearly limitations will be calculated using per-event data points. Data shall be collected and reported on a schedule concurrent with the annual CSO report, June 1 to May 31, of the following year, to include the entire wet season for purposes of determining compliance with these limitations..

[b] Long-term average will be calculated using data collected over a full permit cycle. Data shall be collected and reported for the period of the permit cycle prior to permit renewal.

[c] The total removal efficiency for TSS is to be calculated on a mass balance basis as the percent of solids captured at the CSO Treatment Facility and then permanently removed at the West Point Treatment Plant. The reported monthly average TSS% removal efficiency at West Point may be used for calculating the total removal efficiency for the CSO Treatment Facility.

The final permit limits are effective beginning January 1, 2006 through the end of the permit.

Parameter	Discharge Limitations (Monthly)	Discharge Limitations[a] (Yearly Average)	Discharge Limitations[b] (Long–term Average)
Total Suspended Solids Removal Efficiency[c]	report	50%	NA
Fecal Coliform Bacteria	400/100 mL geometric mean	report	NA
Settleable Solids, ml/l/hr	1.9 Maximum	0.3	NA
Number of Events per year	report	report	NA
Average Volume per year, million gallons	report	report	NA

Parameter	Discharge Limitations (Monthly)	Discharge Limitations[a] (Yearly Average)	Discharge Limitations[b] (Long–term Average)
Parameter	**Average Monthly**	**Maximum of Daily Averages[d]**	
Total Residual Chlorine	NA	39 µg/L	

[a] The yearly limitations will be calculated using per-event data points. Data shall be collected and reported on a schedule concurrent with the annual CSO report, June 1 to May 31, of the following year, to include the entire wet season for purposes of determining compliance with these limitations.

[b] Long-term average will be calculated using data collected over a full permit cycle. Data shall be collected and reported for the period of the permit cycle prior to permit renewal.

[c] The total removal efficiency for TSS is to be calculated on a mass balance basis as the percent of solids captured at the CSO Treatment Facility and then permanently removed at the West Point Treatment Plant. The reported monthly average TSS% removal efficiency at West Point may be used for calculating the total removal efficiency for the CSO Treatment Facility.

[d] The maximum daily effluent concentration determined from a continuous measurement is calculated as the average of the pollutant concentrations measured over the day.

F. Mixing Zone Descriptions

The maximum boundaries of the mixing zones and dilution achieved at the edge of each zone are as follows[1]:

Outfall	Chronic Mixing Zone (feet)	Zone of Acute Criteria Exceedance feet	Chronic Dilution Ratio	Acute Dilution Ratio
West Point	430	43	153:1	32:1
Carkeek CSO[e]	395	39.5	197:1	38:1
Alki CSO[e]	340	34	120:1	20:1
Elliott West CSO[e]	260	26	7.2:1	3.4:1
Henderson/MLK CSO[e]	312	31.2	10.3:1	1.9:1

footnote:
[e] Mixing zone dilution modeling is more accurate for continuous discharges. The resultant dilution ratio that is achieved in the mixing zone of an intermittent discharge such as this is an approximation that is based on reasonable assumptions about the flow characteristics of the discharge and conditions of the receiving water at the time of discharge.

[1] King County Department of Natural Resources, Effluent Dilution Modeling for West Point Wastewater Treatment Plant, Effluent Modeling for Carkeek CSO Outfall, Effluent Modeling for Alki CSO Outfall, June, 2000.

S2. MONITORING REQUIREMENTS

A. Monitoring Schedule

1. Outfall 001 West Point

Compliance Monitoring

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Flow	MGD	Final Effluent	Continuous*	Measurement
BOD_5[a]	mg/l	Influent	Weekly	24-hr. Comp.
$CBOD_5$	mg/l	Influent	Daily	24-hr. Comp.
		Final Effluent[1]	Daily	24-hr. Comp.
TSS	mg/l	Influent	Daily	24-hr. Comp.
		Final Effluent	Daily	24-hr. Comp.
pH	Standard Units	Final Effluent	Continuous*	Measurement
Total Residual Chlorine	µg/l	Chlorinated Effluent[2]	Continuous*	Measurement
		Final Effluent[3]	Continuous*	Measurement
Fecal Coliform	#/100ml	Final Effluent	Daily[4]	Grab

[a] BOD_5 is required for the purpose of comparing to the influent design criteria.

Pretreatment Monitoring

Parameter	Sample Point	Minimum Sampling Frequency	Sample Type
Priority Pollutants Metals	Influent	Quarterly[5,6]	24-hr. Comp.
	Final Effluent	Quarterly[5,6] concurrently with influent sampling	24-hr. Comp.
40 CFR Part 503 metals for biosolids	Biosolids	Quarterly[5,6]. One (1) taken within 3-8 days after influent sample.	Grab
Oil & Grease	Influent	Quarterly[6]	Grab[7]
	Final Effluent	Quarterly[6] concurrently with influent sampling	Grab[7]
Cyanide	Influent	Quarterly[6]	Grab
	Final Effluent	Quarterly[6] concurrently with influent sampling	Grab
	Biosolids	Quarterly[6]. One (1) taken within 3-8 days after influent sample.	Grab

Parameter	Sample Point	Minimum Sampling Frequency	Sample Type
pH	Influent	Quarterly[6]	Grab
	Final Effluent	Quarterly[6] concurrently with influent sampling	Continuous Measurement
	Biosolids	Quarterly[6]. One (1) taken within 3-8 days after influent sample.	Grab
Priority Pollutants Organics	Influent	Annually[6]	24-hr. Comp.
	Final Effluent	Annually[6] concurrently with influent sampling	24-hr. Comp.
	Biosolids	Annually[6]. One (1) taken within 3-8 days after influent sample.	Grab
Total Phenols	Influent	Quarterly[6]	Manual Comp.[7]
	Final Effluent	Quarterly[6]	Manual Comp.[7]
	Biosolids	Quarterly[6]. One (1) taken within 3-8 days after influent sample.	Grab
Other toxic pollutants likely to be present	Influent	Annually[6]	24-hr. Comp.
	Final Effluent	Annually[6] concurrently with influent sampling	24-hr. Comp.
	Biosolids	Annually[6]. One (1) taken within 3-8 days after influent sample.	Grab

Whole Effluent Toxicity

Parameter	Sample Point	Minimum Sampling Frequency	Sample Type
Acute Toxicity Testing	Final Effluent[8]	4/permit cycle	24-hr Comp.
Chronic Toxicity Testing	Final Effluent[8]	4/permit cycle	24-hr Comp.

Sediment

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Sediment		Sediment	1/permit cycle	See S10

Footnotes:

* Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance.
[1] Samples for $CBOD_5$ analysis shall be taken after dechlorination. The sample must be reseeded.
[2] Sample before dechlorination
[3] Sample after dechlorination
[4] Sample after dechlorination. Sample concurrent with Total Residual Chlorine sample.
[5] The method number and detector for metals are as indicated in the table below. WP effluent is being monitored with ICP methodology.
[6] The days selected for sampling shall be rotated quarterly (e.g., first quarter sample Monday, second quarter sample Tuesday, etc.). The testing must be done during a wet season and a dry season.
[7] Oil and Grease must be determined from a minimum of four (4) individually collected grab samples of equal volume collected every two (2) hours over an eight hour period and separately analyzed (i.e., not a 24-hr. composite determination). Total Phenols must be determined from a manual grab composite consisting of four (4) discrete samples collected every two (2) hours over an 8-hour period. Volatile Organic Compounds must be determined from a manual composite consisting of a minimum of four (4) grab samples collected over a 24-hour period, one every four (4) to six (6) hours and composited in the laboratory.
[8] Sample prior to chlorination

Reference Footnote 5:

Parameter	Method Number	Detector
Arsenic	200.7, 200.8	ICP/OES, ICP-MS
Beryllium	200.7, 200.8	ICP/OES, ICP-MS
Cadmium	200.7, 200.8	ICP/OES, ICP-MS
Chromium	200.7, 200.8	ICP/OES, ICP-MS
Copper	200.7, 200.8	ICP/OES, ICP-MS
Lead	200.7, 200.8	ICP/OES, ICP-MS
Mercury	245.2	COLD VAPOR
Nickel	200.7, 200.8	ICP/OES, ICP-MS
Silver	200.7, 200.8	ICP/OES, ICP-MS
Zinc	200.7, 200.8	ICP/OES, ICP-MS
Antimony	200.7, 200.8	ICP/OES, ICP-MS
Selenium	200.7, 200.8	ICP/OES, ICP-MS

Parameter	Method Number	Detector
Thallium	200.7, 200.8	ICP/OES, ICP-MS

ICP-MS Inductively Coupled Plasma-Mass Spectrometry
ICP-OES Inductively Coupled Plasma-Optical Emission Spectrometry

2. Carkeek CSO Treatment Plant

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Flow	MG	Influent[a]	Continuous	Measurement
		Final Effluent	Continuous	Measurement
Rainfall	Inches	Nearby Station	Per Event	Measurement
TSS	mg/L	Influent	Per Event	Flow Proportional Composite[b]
		Final Effluent	Per Event	Flow Proportional Composite[b]
pH	Standard Units	Final Effluent	Per Event	Analyzer Reading or Grab[c]
Total Residual Chlorine	µg/L	Final Effluent	Per Event	Analyzer Reading or Grab[c]
Fecal Coliform	#/100 mL	Final Effluent	Per Event	Grab[c]
Settleable Solids	ml/L/hr	Final Effluent	Per Event	Flow Proportional Composite[b]
BOD_5	mg/L	Influent[a]	Per Event	Flow Proportional Composite[b]
		Final Effluent	Per Event	Flow Proportional Composite[b]
Total percent removal efficiency[d]			Per Month	Calculated Number
Priority Pollutants as defined in 40 CFR App. D Part 122		Final Effluent	1/permit cycle	Flow Proportional Composite[b]

Footnotes:

***** Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance.
[a] Beginning on the effective date of this permit, in accordance with WAC 173-245-090, King County shall limit the number and volume of discharges from the Carkeek CSO Facility. The Permittee's compliance will be evaluated during the last quarter of this permit cycle. Samples must be representative of influent to the CSO treatment facility.
[b] Composite sample should represent the entire discharge event. An event is defined as overflows from the treatment plant separated by more than 48 hours.

[c] Grab samples must be taken at specific time intervals after the discharge begins to the receiving water as follows: (1) 1 sample within first 2 hours (2) 1 sample after 4-8 hours (3) 1 sample after 20-24 hours (4) if the discharges extends beyond 24 hours, at a minimum 1 samples should be taken each day until the discharge ends. Each individual fecal coliform sample should be dechlorinated. The Chorine analyzer reading should be logged at the same time as fecal coliform sample is taken.
[d] The total removal efficiency for TSS is to be calculated on a mass balance basis as the percent of solids captured at the CSO Treatment Plant and then permanently removed at the West Point Treatment Plant based on the estimated removal efficiency at West Point. **Note:** That while % TSS removal is reported on a monthly basis, compliance is based on the a yearly average as reported in the annual CSO report as required in S11.B.

3. Alki CSO Treatment Plant

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Flow	MG	Influent [a]	Continuous	Measurement
		Final Effluent	Continuous	Measurement
Rainfall	inches	Nearby Station	Per Event	Measurement
TSS	mg/L	Influent	Per Event	Flow Proportional Composite[b]
		Final Effluent	Per Event	Flow Proportional Composite[b]
pH	Standard Units	Final Effluent	Per Event	Analyzer Reading or Grab[c]
Total Residual Chlorine	µg/L	Final Effluent	Per Event	Analyzer Reading or Grab[c]
Fecal Coliform	#/100 mL	Final Effluent	Per Event	Grab[c]
Settleable Solids	ml/L/hr	Final Effluent	Per Event	Flow Proportional Composite[b]
BOD_5	mg/L	Influent[a]	Per Event	Flow Proportional Composite[b]
		Final Effluent	Per Event	Flow Proportional Composite[b]
Total percent removal efficiency[d]			Per Month	Per Event
Priority Pollutants as defined in 40 CFR App. D Part 122		Final Effluent	1/permit cycle	Flow Proportional Composite[b]

Footnotes:

* Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance.
[a] Beginning on the effective date of this permit, in accordance with WAC 173-245-090, King County shall limit the number and volume of discharges from the Alki CSO Facility. The Permittee's compliance will be evaluated during the last quarter of this permit cycle. Samples must be representative of influent to the CSO treatment facility.
[b] Composite sample should represent the entire discharge event. An event is defined as overflows from the treatment plant separated by more than 48 hours.
[c] Grab samples must be taken at specific time intervals after the discharge begins to the receiving water as follows: (1) 1 sample within first 2 hours (2) 1 sample after 4-8 hours (3) 1 sample after 20-24 hours (4) if the discharges extends beyond 24 hours, at a minimum 1 samples should be taken each day until the discharge ends. Each individual fecal coliform sample should be dechlorinated. The Chorine analyzer reading should be logged at the same time as fecal coliform sample is taken.
[d] The total removal efficiency for TSS is to be calculated on a mass balance basis as the percent of solids captured at the CSO Treatment Plant and then permanently removed at the West Point Treatment Plant based on the estimated removal efficiency at West Point. **Note:** That while % TSS removal is reported on a monthly basis, compliance is based on the a yearly average as reported in the annual CSO report as required in S11.B.

4. Elliott West CSO Treatment Facility

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Flow	MG	Influent	Per Event	Calculated based on flow to West Point plus the flow to outfall
		Effluent to West Point	Continuous [a]	Measurement
		Effluent to outfall	Continuous [a]	Measurement
Rainfall	inches	Nearby Station	Per Event	Measurement
TSS	mg/L	Influent	Per Event	Calculated[e]
		Final Effluent	Per Event	Flow Proportional Composite[b]
pH	Standard Units	Final Effluent	Per Event	Analyzer Reading or Grab[c]
Total Residual Chlorine	µg/L	Final Effluent	Per Event	Analyzer Reading or Grab[c]

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Fecal Coliform	#/100 mL	Final Effluent	Per Event	Grab[c]
Settleable Solids	ml/L/hr	Final Effluent	Per Event	Flow Proportional Composite[b]
BOD_5	mg/L	Influent[a]	Per Event	Calculated[e]
		Final Effluent	Per Event	Flow Proportional Composite[b]
TSS, Total percent removal efficiency[d]			Per Month	Calculuation [d]
Priority Pollutants as defined in 40 CFR App. D Part 122		Final Effluent	3/permit cycle approximate 1 per year	Flow Proportional Composite[b]

Footnotes:

[a] Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance.

[b] Composite sample should represent the entire discharge event. An event is defined as overflows from the treatment plant separated by more than 48 hours.

[c] Grab samples must be taken at specific time intervals after the discharge begins to the receiving water as follows:

(1) 1 sample within first 2 hours
(2) 1 sample after 4-8 hours
(3) 1 sample after 20-24 hours
(4) if the discharges extends beyond 24 hours, at a minimum 1 samples should be taken each day until the discharge ends.

Each individual fecal coliform sample should be dechlorinated.
The Chorine analyzer reading should be logged at the same time as fecal coliform sample is taken.

[d] The total removal efficiency for TSS is to be calculated on a mass balance basis as the percent of solids captured at the CSO Treatment Facility and then permanently removed at the West Point Treatment Plant based on the estimated removal efficiency at West Point.
Note: That while % TSS removal is reported on a monthly basis, compliance is based on the a yearly average as reported in the annual CSO report as required in S11.B.

[e] The influent concentrations of TSS and BOD is to be calculated on a mass balance basis. The influent concentration is the sum of the mass flow discharged to West Point and the mass flow of Treated Discharged, divided by the total flow discharged.

5. Henderson/MLK CSO Treatment Facility

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Flow	MG	Influent [a]	Continuous [a]	Measurement
		Final Effluent	Continuous [a]	Measurement

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Rainfall	inches	Nearby Station	Per Event	Measurement
TSS	mg/L	Influent	Per Event	Flow Proportional Composite[b]
		Final Effluent	Per Event	Flow Proportional Composite[b]
pH	Standard Units	Final Effluent	Per Event	Analyzer Reading or Grab[c]
Total Residual Chlorine	µg/L	Final Effluent	Per Event	Analyzer Reading or Grab[c]
Fecal Coliform	#/100 mL	Final Effluent	Per Event	Grab[c]
Settleable Solids	ml/L/hr	Final Effluent	Per Event	Flow Proportional Composite[b]
BOD_5	mg/L	Influent[a]	Per Event	Flow Proportional Composite[b]
		Final Effluent	Per Event	Flow Proportional Composite[b]
TSS, Total percent removal efficiency[d]			Per Month	Calculation
Priority Pollutants as defined in 40 CFR App. D Part 122		Final Effluent	3/permit cycle approximate 1 per year	Flow Proportional Composite[b]

Footnotes:

[a] Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance.

[b] Composite sample should represent the entire discharge event. An event is defined as overflows from the treatment plant separated by more than 48 hours.

[c] Grab samples must be taken at specific time intervals after the discharge begins to the receiving water as follows:

(1) 1 sample within first 2 hours
(2) 1 sample after 4-8 hours
(3) 1 sample after 20-24 hours
(4) if the discharges extends beyond 24 hours, at a minimum 1 samples should be taken each day until the discharge ends.

Each individual fecal coliform sample should be dechlorinated.

The Chorine analyzer reading should be logged at the same time as fecal coliform sample is taken.

[d] The total removal efficiency for TSS is to be calculated on a mass balance basis as the percent of solids captured at the CSO Treatment Facility and then permanently removed at the West Point Treatment Plant or South Plant based on the estimated removal efficiency at West Point or South Plant.

Note: That while % TSS removal is reported on a monthly basis, compliance is based on

Footnotes:

the a yearly average as reported in the annual CSO report as required in S11.B.

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

C. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one (1) calibration per year. Calibration records shall be maintained for at least three (3) years.

D. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during each monitoring period shall be summarized, reported, and submitted on a Discharge Monitoring Report (DMR) with forms provided, or otherwise approved, by the Department. DMRs forms shall be received by the Department no later than the **25th day of the month** following the completed monitoring period, unless otherwise specified in this permit. Priority pollutant analysis data shall be submitted no later than sixty (60) days following the monitoring period. All toxicity test data shall be submitted with the next permit application. The report(s) shall be sent to the Department of Ecology, 3190 160th Avenue SE, Bellevue, Washington 98008-5452.

All laboratory reports providing data for organic and metal parameters shall include the following information: sampling date, sample location, date of analysis, parameter name, analytical method/number, method detection limit (MDL), record detection limit (RDL), reporting units, and concentration detected.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three (3) years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Department.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling or measurement; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the

results of such monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the terms and conditions of this permit due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance, correct the problem and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to the Department within thirty (30) days after becoming aware of the violation.

2. In accordance with Federal regulations 40 CFR 122.31 (l)(6)(i), "the permittee shall report noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances."

3. Submit a detailed, written report to the Department within thirty (30) days (as soon as possible but no later than five [5] business days for upsets and bypasses), unless requested earlier by the Department. The report shall contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Reporting - Shellfish Protection

Unauthorized discharges such as collection system overflows, plant bypasses, or failure of the disinfection system of significant public health concern, shall be reported immediately to the Department of Ecology and the Department of Health, Shellfish Program. The Department of Ecology's **Northwest** Regional Office 24-hr. number is **425-649-7000**, and the Department of Health's Shellfish 24-hr. number is 360-753-4183.

S4. FACILITY LOADING

A. Design Criteria (West Point Treatment Plant)

Flows or waste loadings of the following design criteria for the permitted treatment facility shall not be exceeded:

Average flow for the maximum month: **215 MGD**

BOD_5 loading for the maximum month:	**254,000 lbs./day**
TSS loading for the maximum month:	**274,000 lbs./day**

B. Plans for Maintaining Adequate Capacity

The permitee shall submit to the Department a plan and a schedule for continuing to maintain capacity when:

1. The actual flow or waste load reaches 85 percent of any one of the design criteria in S4.A for three (3) consecutive months
2. when the projected increases would reach design capacity within five (5) years,

whichever occurs first. If such a plan is required, it shall contain a plan and schedule for continuing to maintain capacity. The capacity as outlined in this plan must be sufficient to achieve the effluent limitations and other conditions of this permit. This plan shall address any of the following actions or any others necessary to meet this objective.

1. Analysis of the present design including the introduction of any process modifications that would establish the ability of the existing facility to achieve the effluent limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A above.
2. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system.
3. Limitation on future sewer extensions or connections or additional waste loads.
4. Modification or expansion of facilities necessary to accommodate increased flow or waste load.
5. Reduction of industrial or commercial flows or waste loads to allow for increasing sanitary flow or waste load.

Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by the Department prior to any construction. The plan shall specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

D. Notification of New or Altered Sources

The Permittee shall submit written notice to the Department whenever any new discharge or a substantial change in volume or character of an existing discharge into the POTW is proposed which: (1) would interfere with the operation of, or exceed the design capacity of, any portion of the POTW; (2) is not part of an

approved general sewer plan or approved plans and specifications; or (3*)* would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act. This notice shall include an evaluation of the POTW's ability to adequately transport and treat the added flow and/or waste load, the quality and volume of effluent to be discharged to the POTW, and the anticipated impact on the Permittee's effluent [40 CFR 122.42(b)].

Written notice to the Department will be in the form of the draft and final permit submittals and will also be included in the annual Pretreatment Report sent to the Department's NWRO Pretreatment Coordinator.

E. Assessment of Flow and Waste Load

1. Assessment of Flow and Waste Load (West Point Treatment Plant)

The Permittee shall conduct an assessment of their flow and waste load and submit a report to the Department *with the next permit application*. The report shall contain the following: an indication of compliance or noncompliance with the permit effluent limitations; a comparison between the existing and design monthly average dry weather and wet weather flows, peak flows, BOD, and total suspended solids loadings; and the percentage increase in these parameters since the last report. The report shall also state the present and design population or population equivalent, projected population growth rate, and the estimated date upon which the design capacity is projected to be reached, according to the most restrictive of the parameters above. The interval for review and reporting may be modified if the Department determines that a different frequency is sufficient.

2. Assessment of Flow and Waste Load at CSO Treatment Facilities

A flow and solids loading assessment shall be done for each of the CSO treatment facilities to include Carkeek, Alki, Elliott West and Henderson/MLK. The Permittee shall conduct an assessment of the flow and waste load and submit a report to the Department with *the next permit application*. The report shall contain the following: an indication of compliance with the permit effluent limitations and total suspended solids removal efficiency and average volume of the flow and number of events per year. This report should be similar to the annual CSO report, but the reported data should cover the entire permit cycle.

S5. OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or

similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Certified Operator

An operator certified for at least a Class IV plant by the state of Washington shall be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class III plant shall be in charge during all regularly scheduled shifts.

B. O & M Program

The Permittee shall institute an adequate operation and maintenance program for their entire sewage system. Maintenance records shall be maintained on all major electrical and mechanical components of the treatment plant, as well as the sewage system and pumping stations. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection at all times.

C. Short-term Reduction

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limitations on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee shall give written notification to the Department, if possible, thirty (30) days prior to such activities, detailing the reasons for, length of time of, and the potential effects of the reduced level of treatment. This notification does not relieve the Permittee of their obligations under this permit.

D. Electrical Power Failure

The Permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the treatment plant and/or sewage lift stations either by means of alternate power sources, standby generator, or retention of inadequately treated wastes.

The Permittee shall maintain Reliability Class II (EPA 430-99-74-001) at the wastewater treatment plant, which requires a backup power source sufficient to operate all vital components and critical lighting and ventilation during peak wastewater flow conditions, except vital components used to support the secondary processes (i.e., mechanical aerators or aeration basin air compressors) need not be operable to full levels of treatment, but shall be sufficient to maintain the biota.

E. Prevent Connection of Inflow

The Permittee shall strictly enforce their sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

F. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and the Department may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable. The discharge of combined sewer overflows is an intentional diversion and that the discharge is authorized if the discharge is in accordance with the constraints specified within this permit.

1. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

   Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by the Department prior to the bypass. The Permittee shall submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass which is unavoidable, unanticipated, and results in noncompliance of this permit.

   This bypass is permitted only if:

   a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

   b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.

   c. The Department is properly notified of the bypass as required in condition S3E of this permit.

3. Bypass which is anticipated and has the potential to result in noncompliance of this permit

   The Permittee shall notify the Department at least thirty (30) days before the planned date of bypass. The notice shall contain: (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

   For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

The Department will consider the following prior to issuing an administrative order for this type of bypass:

a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.

b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.

c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

G. Operations and Maintenance Manual

The Operations and Maintenance Manuals shall be kept available at the treatment plant and all operators shall follow the instructions and procedures of the manuals.

The Operation and Maintenance Manuals shall be reviewed at least annually and updated as needed. A letter shall be sent to the Department annually confirming that the review and necessary updates were completed.

S6. PRETREATMENT

A. General Requirements

1. The Permittee shall implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the Permittee's approved pretreatment program submittal entitled "Industrial Pretreatment Program" and dated April 27, 1981; any approved revisions thereto; and the General Pretreatment Regulations (40 CFR, Part 403). At a minimum, the following pretreatment implementation activities shall be undertaken by the Permittee:

   a. Enforce categorical pretreatment standards promulgated pursuant to Section 307(b) and (c) of the Federal Clean Water Act (hereinafter, the Act), prohibited discharge standards as set forth in 40 CFR 403.5, local limitations specified in Section (a) of Ordinance (King County Ordinance No. 11034 as amended by King County Ordinance No. 11963 on January 1, 1996, previously known as METRO Resolution 3374), or state standards, whichever are most stringent or apply at the time of issuance or modification of a local industrial waste discharge permit. Locally derived limitations shall be defined as pretreatment standards under Section 307(d) of the Act and shall not be limited to categorical industrial facilities.

   b. Issue industrial waste discharge permits to all significant industrial users [SIUs, as defined in 40 CFR 403.3(t)(i)(ii)] contributing to the treatment system, including those from other jurisdictions. Industrial waste discharge permits shall contain as a minimum, all the requirements of 40 CFR 403.8 (f)(l)(iii). The Permittee shall coordinate the permitting process with the Department regarding any industrial facility, which may possess a state waste discharge permit issued by the Department. Once issued, an industrial waste discharge permit will take precedence over a state-issued waste discharge permit.

   c. Maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by industrial users to the POTW. Records shall be maintained for at least a three (3)-year period.

d. Perform inspections, surveillance, and monitoring activities on industrial users to determine and/or confirm compliance with applicable pretreatment standards and requirements. A thorough inspection of SIUs shall be conducted annually. Frequency of regular local monitoring of SIU wastewaters shall normally be commensurate with the character and volume of the wastewater but shall not be less than once per year. Sample collection and analysis shall be performed in accordance with 40 CFR Part 403.12(b)(5)(ii)-(v) and 40 CFR Part 136.

e. Enforce and obtain remedies for noncompliance by any industrial users with applicable pretreatment standards and requirements. Once violations have been identified, the Permittee shall take timely and appropriate enforcement action to address the noncompliance. The Permittee's action shall follow its enforcement response procedures and any amendments, thereof.

f. Publish, at least annually in the largest daily newspaper in the Permittee's service area, a list of all non-domestic users which, at any time in the previous twelve (12) months, were in significant noncompliance as defined in 40 CFR 403.8(f)(2)(vii).

g. If the Permittee elects to conduct sampling of a SIU's discharge in lieu of the user self-monitoring, it shall sample and analyze for all regulated pollutants in accordance with 40 CFR Part 403.12(b)(5)(ii)-(v), 40 CFR 403.12(g), and 40 CFR Part 136. The character and volume of the samples shall be representative of the discharge and shall provide adequate data to determine compliance, but in no case should sampling occur less than two (2) times per year.

h. Develop and maintain a data management system designed to track the status of the Permittee's industrial user inventory, industrial user discharge characteristics, and compliance status.

i. Maintain adequate staff, funds, and equipment to implement its pretreatment program.

j. Establish, where necessary, contracts or legally binding agreements with contributing jurisdictions to ensure compliance with applicable pretreatment requirements by commercial or industrial users within these jurisdictions. These contracts or agreements shall identify the agency responsible for the various implementation and enforcement activities to be performed in the contributing jurisdiction.

2. The Permittee shall implement the Accidental Spill Prevention Program described in the approved Industrial Pretreatment Program dated April 27, 1981.

3. The Permittee shall evaluate, at least once every two (2) years, whether each Significant Industrial User needs a plan to control slug discharges. For purposes of this subsection, a slug discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or non-customary batch discharge. The results of such activities shall be available to the Department upon request. If the Permittee decides that a slug control plan is needed, the plan shall contain, at a minimum, the following elements:

   a. Description of discharge practices, including non-routine batch discharges.

   b. Description of stored chemicals.

   c. Procedures for immediately notifying the Permittee of slug discharges, including any discharge that would violate a prohibition under 40 CFR 403.5(b), with procedures for follow-up written notification within five (5) days.

   d. If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment necessary for emergency response.

4. Whenever it has been determined, on the basis of information provided to or obtained by the Department, that any waste source contributes pollutants to the Permittee's treatment works in violation of Subsection (b), (c), or (d) of Section 307 of the Act, and the Permittee has not taken adequate corrective action, the Department shall notify the Permittee of this determination. Failure by the Permittee to commence an appropriate enforcement action within thirty (30) days of this notification may result in appropriate enforcement action by the Department against the source and/or the Permittee.

5. Pretreatment Report

   The Permittee shall provide to the Department an annual report that briefly describes its program activities during the previous calendar year. This report shall be submitted no later than March 31 of each year to:

   Washington State Department of Ecology
   Northwest Regional Office

3190 – 160th Avenue SE
Bellevue, Washington 98008-5452

The report shall include the following information:

a. An updated non-domestic inventory.

b. Results of wastewater sampling at the treatment plant as specified in Subsection B below. The Permittee shall calculate removal rates for each pollutant and evaluate the adequacy of the existing local limitations in Section (a) of Ordinance (METRO Resolution 3374) in prevention of treatment plant interference, pass through of pollutants that could affect receiving water quality, and biosolids contamination.

c. Status of program implementation, including:

(1) Any substantial modifications to the pretreatment program as originally approved by the Department, including staffing and funding levels.

(2) Any interference, upset, or permit violations experienced at the POTW that are directly attributable to wastes from industrial users.

(3) Listing of industrial users inspected and/or monitored, and a summary of the results.

(4) Listing of industrial users scheduled for inspection and/or monitoring for the next year, and expected frequencies.

(5) Listing of industrial users notified of promulgated pretreatment standards and/or local standards as required in 40 CFR 403.8(f)(2)(iii). Indicate which industrial users are on compliance schedules and the final date of compliance for each.

(6) Listing of industrial users issued industrial waste discharge permits.

(7) Planned changes in the pretreatment program implementation plan. (See Subsection A.6 below.)

d. Status of compliance activities, including:

(1) Listing of industrial users that failed to submit baseline monitoring reports or any other reports required under 40 CFR 403.12 and in Permittee's pretreatment program, dated April 27, 1981.

(2) Listing of industrial users that were at any time during the reporting period not complying with federal, state, or local pretreatment standards or with applicable compliance schedules for achieving those standards, and the duration of such noncompliance.

(3) Summary of enforcement activities and other corrective actions taken or planned against non-complying industrial users. The Permittee shall supply to the Department a copy of the public notice of facilities that were in significant noncompliance.

6. The Permittee shall request and obtain approval from the Department prior to implementing any significant changes to the local pretreatment program as approved. The procedure of 40 CFR 403.18 (b) & (c) shall be followed.

B. Monitoring Requirements

The Permittee shall monitor its influent, effluent, and biosolids for the priority pollutants identified in Tables II and III of Appendix D of 40 CFR Part 122 as amended, any compounds identified as a result of Condition S6.B.4, and any other pollutants expected from non-domestic sources using U.S. EPA-approved procedures for collection, preservation, storage, and analysis. Influent, effluent, and biosolids samples shall be tested for the priority pollutant metals (Table III, 40 CFR 122, Appendix D) on a quarterly basis throughout the term of this permit. Influent, effluent, and biosolids samples shall be tested for the organic priority pollutants (Table II, 40 CFR 122, Appendix D) on an annual basis. Analyses performed on biosolids samples shall be in accordance with 40 CFR 503.

1. The POTW influent and effluent shall be sampled on a day when industrial discharges are occurring at normal to maximum levels. Samples for the analysis of acid and base/neutral extractable compounds and metals shall be 24-hour composites. Samples for the analysis of volatile organic compounds shall be collected using grab sampling techniques at equal intervals for a minimum of four (4) grab samples per day.

   A single analysis for volatile pollutants (Method 624) may be run for each monitoring day by compositing equal volumes of each grab sample directly in the GC purge and trap apparatus in the laboratory, with no less than one (1) ml of each grab included in the composite.

   Unless otherwise indicated, all reported test data for metals shall represent the total amount of the constituent present in all phases, whether solid, suspended, or dissolved, elemental or combined including all oxidation states.

2. A biosolids sample shall be collected *3-8 days after the influent sample is collected (Permit Section S2A.1)*. Sampling and analysis shall conform to U.S. EPA Methods 624 and 625 unless the Permittee requests an alternate method and it has been approved by the Department.

   The Department approves alternate U.S. EPA methods 8260 and 8270 to be used with a solid matrix such as Biosolids.

3. Phenols and oils shall be taken as grab samples *per footnote 7 to the table in S2.A.1*. Oils shall be hexane soluble or equivalent, and should be measured in the influent and effluent only.

4. In addition to quantifying pH, oil and grease, and all priority pollutants, a reasonable attempt should be made to identify all other substances and quantify all pollutants shown to be present. Determinations of pollutants should be attempted for each fraction, which produces identifiable spectra on total ion plots (reconstructed gas chromatograms). Determinations should be attempted from all peaks with responses 5% or greater than the nearest internal standard. The 5% value is based on internal standard concentrations of 30 µg/l, and must be adjusted downward if higher internal standard concentrations are used or adjusted upward if lower internal standard concentrations are used. Non-substituted aliphatic compounds may be expressed as total hydrocarbon content. Identification shall be attempted by a laboratory whose computer data processing programs are capable of comparing sample mass spectra to a computerized library of mass spectra, with visual confirmation by an experienced analyst. For all detected substances which are determined to be pollutants, additional sampling and appropriate testing shall be conducted to determine concentration and variability, and to evaluate trends.

C. Reporting of Monitoring Results

The Permittee shall include a summary of monitoring results in the Annual Pretreatment Report as specified in S6. A. 5.

D. Local Limit Development

As sufficient data becomes available, the Permittee shall, in consultation with the Department, re-evaluate their local limits in order to prevent pass through or interference. Upon determination by the Department that any pollutant present causes pass through or interference, or exceeds established biosolids standards, the Permittee shall establish new local limits or revise existing local limits as required by 40 CFR 403.5. In addition, the Department may require revision or establishment of local limits for any pollutant discharged from the POTW that has a reasonable potential to exceed the Water Quality Standards, Sediment Standards, or established effluent limits, or causes whole effluent

toxicity. The determination by the Department shall be in the form of an Administrative Order.

The Department may modify this permit to incorporate additional requirements relating to the establishment and enforcement of local limits for pollutants of concern. Any permit modification is subject to formal due process procedures pursuant to state and federal law and regulation.

S7. RESIDUAL SOLIDS

Residual solids include screenings, grit, scum, primary sludge, waste activated sludge, and other solid waste. The Permittee shall store and handle all residual solids in such a manner so as to prevent their entry into state ground or surface waters. The Permittee shall not discharge leachate from residual solids to state surface or ground waters.

S8. ACUTE TOXICITY (APPLIES TO WEST POINT TREATMENT PLANT ONLY)

A. Testing Requirements

The Permittee shall test final effluent once per quarter in the year prior to submission of the application for permit renewal and in accordance with the submittal dates as listed on the Summary of Permit Report Submittals. The two species listed below shall be used on each sample and the results submitted to the Department as a part of the permit renewal application process. The Permittee shall conduct acute toxicity testing on a series of five concentrations of effluent and a control in order to be able to determine appropriate point estimates and an NOEC (no observed effect concentration). The percent survival in 100% effluent shall also be reported.

Acute toxicity tests shall be conducted with the following species and protocols:

1. Fathead minnow, *Pimephales promelas* (96-hour static-renewal test, method: EPA/800/R/02/012)

2. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48-hour static test, method: EPA/800/R/02/012).

B. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria,* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on 24-hour composite effluent samples. Samples taken for toxicity testing shall be cooled while being collected and while being delivered to the testing facility in order to meet the sample requirements of #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. The lab shall begin toxicity testing as soon as possible but no later than 36 hours after sampling was ended.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria,* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in Subsection A and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in Subsection A or pristine natural water of sufficient quality for good control performance.

6. Effluent samples for whole effluent toxicity testing shall be collected just prior to the chlorination step in the treatment process.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five (5) effluent concentrations and a control. The series of concentrations must include the acute critical effluent concentration (ACEC). The ACEC equals 3.1% effluent.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S9. CHRONIC TOXICITY (APPLIES TO WEST POINT TREATMENT PLANT ONLY)

A. Testing Requirements

The Permittee shall test final effluent once per quarter in the year prior to submission of the application for permit renewal and in accordance with the submittal dates as listed on the Summary of Permit Report Submittals. All of the chronic toxicity tests listed below shall be conducted on each sample. The results of this chronic toxicity testing shall be submitted to the Department as a part of the permit renewal application process.

The Permittee shall conduct chronic toxicity testing on a series of at least five (5) concentrations of effluent and a control in order to be able to determine appropriate point estimates and an NOEC. This series of dilutions shall include the ACEC. The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Chronic toxicity tests shall be conducted with the following species and the most recent version of the following protocols:

Saltwater Chronic Toxicity Test Species		Method
Topsmelt or Silverside minnow	*Atherinops affinis* or *Menidia beryllina*	EPA/600/R-95/136 or EPA/821/R/02/014
Mysid shrimp	*Holmesimysis costata* or *Mysidopsis bahia*	EPA/600/R-95/136 or EPA/821/R/02/014

The Permittee shall use the West Coast fish (topsmelt, *Atherinops affinis*) and mysid (*Holmesimysis costata*) for toxicity testing unless the lab cannot obtain a sufficient quantity of a West Coast species in good condition in which case the East Coast fish (silverside minnow, *Menidia beryllina*) or mysid (*Mysidopsis bahia*) may be substituted.

B. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria,* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on 24-hour composite effluent samples. Samples taken for toxicity testing shall be cooled while being collected and while being delivered to the testing facility in order to meet the sample requirements of #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. The lab shall begin toxicity testing as soon as possible but no later than 36 hours after sampling was ended.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria,* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in Subsection A and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in Subsection A or pristine natural water of sufficient quality for good control performance.

6. Effluent samples for whole effluent toxicity testing shall be collected just prior to the chlorination step in the treatment process.

7. The Permittee may choose to conduct a full dilution series test in order to determine dose response. In this case, the series must have a minimum of five (5) effluent concentrations and a control. The series of concentrations must include the ACEC and the CCEC. The ACEC and the chronic critical effluent concentration (CCEC) may either substitute for the effluent concentration that is closest to it in the dilution series or be an extra effluent concentration. The CCEC equals 0.65% effluent.

8. All whole effluent toxicity tests that involve hypothesis testing and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S10. SEDIMENT MONITORING (MARINE) (APPLIES TO WEST POINT TREATMENT PLANT ONLY)

A. Sediment Sampling and Analysis Plan

The Permittee shall submit to the Department for review and approval a Sediment Sampling and Analysis Plan for sediment monitoring *no later than one year after permit effective date*. The purpose of the plan is to recharacterize sediment quality in the vicinity of the *West Point WWTP outfall* discharge location. The Permittee shall follow the guidance provided in the Sediment Source Control Standards User Manual, Appendix B: Sediment Sampling and Analysis Plan (Ecology, 2003).

B. Sediment Data Report

Following Department approval of the Sediment Sampling and Analysis Plan, sediments will be collected and analyzed. The Permittee shall submit to the Department a Sediment Data Report containing the results of the sediment sampling on or before the date as stated on the Summary of Permit Report Submittals. The Sediment Data Report shall conform to the approved Sampling and Analysis Plan.

The Data Report shall also include electronic copies of the sediment chemical and biological data reported in the Department's Sediment Quality Information System template format.

S11. ADDITIONAL TESTING OF EFFLUENT

The Permittee shall conduct chemical analyses of effluent samples collected from the wastewater treatment system in accordance with protocols, monitoring requirements, and QA/QC procedures specified in this section. The following analyses are required in the application for permit renewal, EPA form 2A.

A. Additional Chemical Analysis

The following parameters shall be tested on the Permittee's final effluent:

Ammonia (as N)
Dissolved Oxygen
Total Kjeldahl Nitrogen (TKN)
Nitrate + Nitrite Nitrogen
Oil & Grease
Total Phosphorus

Total Dissolved Solids (TDS)

B. Protocols

Sample analysis shall be conducted in accordance with 40 CFR Part 136. It is appropriate for 24-hour composite sampling to be performed for Ammonia, TKN, Total Phosphorus, and TDS determinations. It is appropriate for grab sampling to be performed on Dissolved Oxygen, Nitrite-Nitrate, and Oil & Grease determinations. The Oil & Grease determinations performed to comply with the monitoring requirements to develop, implement, and enforce the Pretreatment Program (Permit Condition S2.A.1.) may be used to complete the Oil & Grease line item requirement within Part B.6 of Form 2A NPDES (with the next permit application) as long as the data is no more than four and one-half years old.

C. Quality Assurance/Quality Control Procedures

The Permittee shall follow the quality assurance procedures of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old (see instructions to Part B.6 of Form 2A NPDES).

S12. COMBINED SEWER OVERFLOWS

A. Discharge Locations

The following is a list of combined sewer overflows (CSOs), which are occasional point sources of pollutants as a result of precipitation events. Discharges from these sites are prohibited except as a result of precipitation events. No authorization is given by this permit for discharge from a CSO that causes adverse impacts that threaten characteristic uses of the receiving water as identified in the Water Quality Standards, Chapter 173-201A WAC or that results in an exceedence of the Sediment Management Standards, Chapter 173-204 WAC. It is recognized that exceedance of these standards may result from the contributions of many sources, both historic and present. The department shall modify this permit whenever it appears the discharge causes a violation, or creates a substantial potential to cause a violation of the applicable sediment quality standards of 173-204-320 through 173-204-340, as authorized by RCW 90.48.520.[2]

DISCHARGE NO.	LOCATION	RECEIVING WATER
Outfall 046	Carkeek CSO Treatment Plant	Puget Sound
Outfall 051	Alki CSO Treatment Plant	Puget Sound
003	Ballard Siphon Regulator (CSO) Canal via Seattle Storm Drain	Lake Washington Ship Canal

[2] WAC 173-204-400(8)

DISCHARGE NO.	LOCATION	RECEIVING WATER
004	East Ballard Overflow (CSO) (AKA 11th Avenue NW)	Lake Washington Ship Canal
006	Magnolia Overflow (CSO)	Elliott Bay/Puget Sound
008	3rd and Ewing Street (CSO)	Lake Washington Ship Canal
009	Dexter Avenue Regulator (CSO)	Lake Union
013	Martin Luther King Way Trunkline Overflow (CSO)	Lake Washington via Storm Drain
014	Montlake Overflow (CSO)	Lake Washington Ship Canal
015	University Regulator (CSO)	Lake Washington Ship Canal
027b	Elliottt West CSO Outfall	Elliottt Bay
027a	Denny Way Regulator (& Interbay Pump Station Emergency Overflow) (CSO)	Elliott Bay
028	King Street Regulator (CSO)	Elliott Bay
029	Connecticut Street Regulator (CSO)	Elliott Bay
030	Lander Street Regulator (CSO)	Duwamish River – East Waterway
031	Hanford #1 Overflow (CSO)	Duwamish River via Diagonal storm drain
032	Hanford Regulator #2 (CSO)	Duwamish River – East Waterway
036	Chelan Avenue Regulator (CSO)	West Waterway of Duwamish River Estuary
037	Harbor Avenue Regulator (CSO)	Duwamish River Estuary into Elliott Bay/Puget Sound
039	Michigan Regulator (a.k.a. S. Michigan Regulator (CSO)	Duwamish River
040	8th Avenue South Regulator (CSO) (West Marginal Way Pump Station Emergency Overflow)	Duwamish River
041	Brandon Street Regulator (CSO)	Duwamish River
042	West Michigan Regulator (CSO) (a.k.a. S.W. Michigan St. Regulator)	Duwamish River
044	Norfolk Street Regulator (CSO) Henderson/MLK Treatment Facility Discharge	Duwamish River
045	Henderson Street Pump Station Emergency Overflow (CSO)	Lake Washington

DISCHARGE NO.	LOCATION	RECEIVING WATER
048	North Beach Pump Station Emergency Overflow (CSO)	Puget Sound
007	Canal Street Overflow (CSO)	Lake Washington Ship Canal
011	East Pine Street Pump Station Emergency Overflow (CSO)	Lake Washington
012	Belvoir Pump Station Emergency Overflow (CSO)	Lake Washington
018	Matthews Park Pump Station Emergency Overflow (CSO)	Lake Washington
033	Rainier Avenue Pump Station Emergency Overflow (CSO)	Lake Washington
034	East Duwamish River Siphon/Duwamish Pump Station Emergency Overflow (CSO)	Duwamish River
035	West Duwamish River Siphon/Duwamish Pump Station Emergency Overflow (CSO)	Duwamish River
038	Terminal 115 Overflow (CSO)	Duwamish River
043	East Marginal Pump Station Emergency Overflow (CSO)	Duwamish River
049	30th Avenue N.E. Pump Station Emergency Overflow (CSO)	Lake Washington
053	53rd Street S.W. Pump Station Emergency Overflow (CSO)	Puget Sound
054	63rd Street S.W. Pump Station Emergency Overflow (CSO)	Puget Sound
055	S.W. Alaska Street Overflow (CSO)	Puget Sound
056	Murray Street Pump Station Emergency Overflow (CSO)	Puget Sound
057	Barton Street Pump Station Emergency Overflow (CSO)	Puget Sound

B. Combined Sewer Overflow Report

By November 1, 2004, and annually thereafter, the Permittee shall submit a CSO Report to the Department for review and approval, which complies with the requirements of WAC 173-245-090(1).

C. Combined Sewer Overflow Reduction Plan Amendment

In conjunction with the application for renewal of this permit, the Permittee shall submit an amendment of its CSO Reduction Plan to the Department for review

and approval. The amendment shall comply with the requirements of WAC 173-245-040(2).

D. Compliance Schedule

In order to achieve the greatest reasonable reduction of combined sewer overflows at the earliest possible date, the following elements of the approved Combined Sewer Overflow Reduction Plan shall be accomplished in accordance with the following schedule of milestone dates accruing during this permit.

FACILITY	COMPLETION DATE
Denny Way/Dexter CSO Control Project	Originally, December, 2004 Actual Completion Date April, 2005
Henderson/Martin Luther King Jr. Way/Norfolk CSO Control Project	December, 2005

E. Nine Minimum Controls

In accordance with WAC 173-245 and US EPA CSO control policy (59 FR 18688), the permitee must implement and document the following nine minimum controls (NMC) for CSOs. Compliance with the NMC shall be documented in the annual CSO report as required in S12.B.

The permittee shall comply with the following technology-based requirements:

1. The permittee shall implement proper operation and maintenance programs for the sewer system and all CSO outfalls to reduce the magnitude, frequency, and duration of CSOs. The program shall consider regular sewer inspections; sewer, catch basin, and regulator cleaning; equipment and sewer collection system repair or replacement, where necessary; and disconnection of illegal connections.
2. The permittee shall implement procedures that will maximize use of the collection system for wastewater storage that can be accommodated by the storage capacity of the collection system in order to reduce the magnitude, frequency, and duration of CSOs.
3. The permittee shall review and modify, as appropriate, its existing pretreatment program to minimize CSO impacts from the discharges from nondomestic users.
4. The permittee shall operate the POTW treatment plant at maximum treatable flow during all wet weather flow conditions to reduce the magnitude,

frequency, and duration of CSOs. The permittee shall deliver all flows to the treatment plant within the constraints of the treatment capacity of the POTW.

5. Dry weather overflows from CSO outfalls are prohibited. Each dry weather overflow must be reported to the permitting authority as soon as the permittee becomes aware of the overflow. When the permittee detects a dry weather overflow, the permittee shall begin corrective action immediately. The permittee shall inspect the dry weather overflow each subsequent day until the overflow has been eliminated.
6. The permittee shall implement measures to control solid and floatable materials in CSOs.
7. The permittee shall implement a pollution prevention program focused on reducing the impact of CSOs on receiving waters.
8. The permittee shall implement a public notification process to inform the citizens of when and where CSOs occur. The process must include (a) mechanism to alert persons of the occurrence of CSOs and (b) a system to determine the nature and duration of conditions that are potentially harmful for users of receiving waters due to CSOs.
9. The permittee shall monitor CSO outfalls to characterize CSO impacts and the efficacy of CSO controls. This shall include collection of data that will be used to document the existing baseline conditions, evaluate the efficacy of the technology-based controls, and determine the baseline conditions upon which the long-term control plan will be based. These data shall include:
    a. Characteristics of combined sewer system including the population served by the combined portion of the system and locations of all CSO outfalls in the CSS
    b. Total number of CSO events and the frequency and duration of CSOs for a representative number of events
    c. Locations and designated uses of receiving water bodies
    d. Water quality data for receiving water bodies
    e. Water quality impacts directly related to CSO (e.g., beach closing, floatables, wash-up episodes, fish kills).

S13. WET WEATHER OPERATION

A CSO-related bypass of the secondary treatment portion of the West Point Treatment Plant is authorized when the flow rate to the POTW as a result of a precipitation event exceed 300 MGD. Bypasses that occur when the flow at the time of the bypass is under the specified flow rate are not authorized under this condition and are subject to the bypass provisions as stated in S5.F. of the permit. In the event of a CSO related bypass authorized under this condition, the permitee shall minimize the discharge of pollutants to the environment. At a minimum, CSO-related bypass flows must receive primary

clarification, solids and floatables removal, and disinfection. The final discharge must at all times meet effluent limitations of this permit as listed in S1.

The permittee shall maintain records of all CSO-related bypasses at the treatment plant. These records shall document the duration and the dates of the bypassing, and the magnitude of the precipitation event. All occurrences of bypassing must be reported. The report must include the above information shall be included in narrative form with the discharge monitoring report.

S14. OUTFALL EVALUATION (APPLIES TO WEST POINT TREATMENT PLANT ONLY)

The Permittee shall inspect once during the life of this permit, the submerged portion of the outfall line and diffuser to document its integrity and continued function. The inspection report shall be submitted to the Department in conjunction with the permit application. If conditions allow for a photographic verification, it shall be included in the report.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

A. All permit applications shall be signed by either a principal executive officer or a ranking elected official.

B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Department.

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this section shall make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G2. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.

B. To have access to and copy - at reasonable times and at reasonable cost - any records required to be kept under the terms and conditions of this permit.

C. To inspect - at reasonable times - any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.

D. To sample or monitor - at reasonable times - any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:

1. Violation of any permit term or condition.
2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
3. A material change in quantity or type of waste disposal.
4. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].
5. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR part 122.64(4)].
6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
7. Failure or refusal of the permittee to allow entry as required in RCW 90.48.090.

B. The following are causes for modification but not revocation and reissuance except when the permittee requests or agrees:

1. A material change in the condition of the waters of the state.
2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.

5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR part 122.62.

6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.

7. Incorporation of an approved local pretreatment program into a municipality's permit.

C. The following are causes for modification or alternatively revocation and reissuance:

1. Cause exists for termination for reasons listed in A1 through A7 of this section, and the Department determines that modification or revocation and reissuance is appropriate.

2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

G4. REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, but no later than sixty (60) days prior to the proposed changes, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation of the terms and conditions of this permit.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities shall be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. DUTY TO REAPPLY

The Permittee shall apply for permit renewal at least 180 days prior to the specified expiration date of this permit.

G8. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

A. Transfers by Modification

Except as provided in paragraph (B) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G9. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G10. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G11. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to the Department, within a reasonable time, all information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this

permit. The Permittee shall also submit to the Department upon request, copies of records required to be kept by this permit.

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. ADDITIONAL MONITORING

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G14. PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by the Department.

G15. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars ($10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars ($10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G16. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.E; and 4) the Permittee complied with any remedial measures required under S4.C of this permit.

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G17. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G18. DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G19. TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G20. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

G21. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least one hundred and eighty (180) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during noncritical water quality periods and carried out in a manner approved by the Department.

G22. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Department, it shall promptly submit such facts or information.

G23. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify the Department as soon as they know or have reason to believe:

A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"

1. One hundred micrograms per liter (100 μg/l).

2. Two hundred micrograms per liter (200 μg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony.

3. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).

4. The level established by the Director in accordance with 40 CFR 122.44(f).

B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"

1. Five hundred micrograms per liter (500μg/L).

2. One milligram per liter (1 mg/L).

3. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).

4. The level established by the Director in accordance with 40 CFR 122.44(f).

G24. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.